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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,609	08/13/2001	Eric O. Bodnar	SF/0018.06	7909

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EXAMINER

FLEURANTIN, JEAN B

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 07/25/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/928,609

Applicant(s)

BODNAR ET AL.

Examiner

Jean B Fleurantin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7 and 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 1-3, 5-7 and 9-20 are remained pending for examination.

Response to Applicant' Remarks

2. Applicant's arguments filed on 07/07/03 with respect to claims have been considered but are not persuasive for the following reasons:

In response to applicant's argument on page 7, that the reference(s) fail(s) to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a super-set data repository for synchronization among more than two clients) are not recited in the rejected claim(s) 1. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant stated on pages 7, that the data repository of claim 1 is nowhere to be found in Boothby, much less a data repository of user information for which any user desires synchronization support. It is respectfully submitted that Boothby reference discloses the claimed limitation as follow: a method for synchronizing multiple data sets (thus, program that synchronize database, which is equivalent to synchronizing multiple data sets)(see, col. 1, lines 5-6) as claimed comprises establishing a data repository for facilitating synchronization of user information maintained among multiple data sets (thus, corresponding sets of records are chose from each of the two database and from the status file, which is equivalent to establishing a data repository for facilitating synchronization of user information maintained among multiple data sets)(see, col. 1, lines 25-27),

storing at least one mapping which specifies how user information may be transformed for storage at a given data set (thus, action is taken at this point time because this desktop could eventually be replaced if an exact match is later found for this status file record, which is readable as storing at least one mapping which specifies how user information may be transformed for storage at a given data set)(see figure 4, cols. 6 and 7, lines 40-49 and 12-41);

based on user information stored at said at least one data set and based on said at least one mapping (see, col. 5, lines 20-23), propagating to the data repository from each of at said at least one data set any changes made to the user information, to the extent that such changes can be reconciled with user information already present at said data repository, (see, col. 6, lines 44-49);

based on user information stored at said data repository and based on said at least one mapping, propagating to each of said at least one data set any changes to the user information which have been propagated to the data repository, to the extent that such changes are not present at said each data set (thus, the status file contains the data present in the two databases after the most recent synchronization, corresponding sets of records are chosen from each of the two databases and from the status file and a comparison is made of the information content of the records, based on that comparison, updating decisions are made for each set of records for example decisions are made whether to select the information content of one database record over the information content of the other and finally the selected information is written to the status file as well as the databases; which is readable as based on user information stored at said data repository and based on said at least one mapping, propagating to each of said at least one data set any changes to the user information which have been propagated to the data repository,

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to the extent that such changes are not present at said each data set)(see column 3, lines 23-34). But, Boothby does not explicitly indicate said data repository storing user information that is a super-set of all user information stored at the data sets. However, Boothby implicitly indicates the status file P which is save after synchronization and used as input to the next synchronization, is a file containing one record per pair of synchronization handhold and desktop records, each status file record is a simple unconflicted record, due to mapping of handhold records to desktop records the use of only one set presents no problem with respect to the other set (see col. 5, lines 46-53). Further, in columns 8-9, lines 67-2, Boothby strongly suggest the invention may be used to synchronize data of two or more desktop computers, two or more notebook computer, two or more handhold computers. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Boothby with said data repository storing user information that is a super-set of all user information stored at the data sets. This modification would allow the teachings of Boothby to improve the accuracy and the reliability of the data processing environment with methods providing contemporaneous synchronization of two or more clients, and provide a backup function for information in a database (see col. 3, lines 65-66).

In response to applicant's argument on page 8, that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge

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gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Further, see cols. 8-9, lines 67-6.

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

For the above reasons, the Examiner believes that the last Office Action was proper.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3, 5-7, 9-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 5-19 (U.S. Patent No. 6,275,831). Although the conflicting claims are not identical, they are not patentably distinct from each other because: claims 1-3 and 5-19 recite the same only method claims instead of apparatus claims in the application file number 09/928,609 as claims 1-3, 5-7 and 9-20 respectively as claims 1-3 and 5-19.

The difference between claim 1 of the U.S. No. 6,275,831, Patent and the claim 1 of the No. 09/928,609 application is as follows:

the patent claim 1, recites the steps of: a data processing environment, a method for synchronizing multiple data sets, the method comprising: establishing a data repository for facilitating synchronization of user information maintained among multiple data sets, said data repository storing user information from the data sets;

storing at least one mapping which specifies how user information may be transformed for storage at a given data set;

based on user information stored at said at least one data set and based on said at least one mapping, propagating to the data repository from each of said at least one data set any changes made to the user information, to the extent that such changes can be reconciled with user information already present at said data repository;

based on user information stored at said data repository and based on said at least one mapping, propagating to each of said at least one data set any changes to the user information which have been propagated to the data repository, to the extent that such changes are not present at said each data set;

wherein a particular one of the data sets resides on a client device which is intermittently connected, and wherein said steps of propagating are deferred for the particular data set until the client device is actually connected.

The application claim 1, recites the steps of: a data processing environment, a method for synchronizing multiple data sets, the method comprising: establishing a data repository for facilitating synchronization of user information maintained among multiple data sets, said data repository storing user information that is a super-set of all user information stored at the data sets;

storing at least one mapping which specifies how user information may be transformed for storage at a given data set;

receiving a request for synchronizing at least one data set;

based on user information stored at said at least one data set and based on said at least one mapping, propagating to the data repository from each of at said at least one data set any changes made to the user information, to the extent that such changes can be reconciled with user information already present at said data repository; and

based on user information stored at said data repository and based on said at least one mapping, propagating to each of said at least one data set any changes to the user information which have been propagated to the data repository, to the extent that such changes are not present at said each data set.

The patent claimed wherein a particular one of the data sets resides on a client device which is intermittently connected, and wherein said steps of propagating are deferred for the particular data set until the client device is actually connected. Thus, the application claimed

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based on user information stored at said data repository and based on said at least one mapping, propagating to each of said at least one data set any changes to the user information which have been propagated would have been obvious to the patent claimed to delete steps wherein a particular one of the data sets resides on a client device which is intermittently connected, and wherein said steps of propagating are deferred for the particular data set until the client device is actually connected, to provide a methods which allow a user of information processing devices to synchronize user information, (see Bodnar col. 3, lines 23-25).

Claims 1-3, 5-7, 9-20 of the present Application Serial Number 09/928,609 recites the same limitations as claims 1-3 and 5-19 respectively of the U.S. Patent No. 6,275,831.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 5-7 and 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,684,990 issued to Boothby ("boothby").

As per claim 1, Boothby teaches a data processing environment, a method for synchronizing multiple data sets (thus, program that synchronize database, which is equivalent to synchronizing multiple data sets)(see col. 1, lines 5-6) as claimed comprises establishing a data repository for facilitating synchronization of user information maintained among multiple data sets (thus, corresponding sets of records are chose from each of the two database and from the

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status file, which is equivalent to establishing a data repository for facilitating synchronization of user information maintained among multiple data sets)(see col. 1, lines 25-27),

storing at least one mapping which specifies how user information may be transformed for storage at a given data set (thus, action is taken at this point time because this desktop could eventually be replaced if an exact match is later found for this status file record, which is readable as storing at least one mapping which specifies how user information may be transformed for storage at a given data set)(see figure 4, cols. 6 and 7, lines 40-49 and 12-41);

based on user information stored at said at least one data set and based on said at least one mapping (see col. 5, lines 20-23), propagating to the data repository from each of at said at least one data set any changes made to the user information, to the extent that such changes can be reconciled with user information already present at said data repository, (see, col. 6, lines 44-49);

based on user information stored at said data repository and based on said at least one mapping, propagating to each of said at least one data set any changes to the user information which have been propagated to the data repository, to the extent that such changes are not present at said each data set (thus, the status file contains the data present in the two databases after the most recent synchronization, corresponding sets of records are chosen from each of the two databases and from the status file and a comparison is made of the information content of the records, based on that comparison, updating decisions are made for each set of records for example decisions are made whether to select the information content of one database record over the information content of the other and finally the selected information is written to the status file as well as the databases; which is readable as based on user information stored at said

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data repository and based on said at least one mapping, propagating to each of said at least one data set any changes to the user information which have been propagated to the data repository, to the extent that such changes are not present at said each data set)(see column 3, lines 23-34). But, Boothby does not explicitly indicate said data repository storing user information that is a super-set of all user information stored at the data sets. However, Boothby implicitly indicates the status file P which is save after synchronization and used as input to the next synchronization, is a file containing one record per pair of synchronization handhold and desktop records, each status file record is a simple unconflicted record, due to mapping of handhold records to desktop records the use of only one set presents no problem with respect to the other set, (see col. 5, lines 46-53). Further, in columns 8-9, lines 67-2, Boothby teaches the invention may be used to synchronize data of two or more desktop computers, two or more notebook computer, two or more handhold computers. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Boothby with said data repository storing user information that is a super-set of all user information stored at the data sets. This modification would allow the teachings of Boothby to improve the accuracy and the reliability of the data processing environment with methods providing contemporaneous synchronization of two or more clients, and provide a backup function for information in a database, (see col. 3, lines 65-66).

As per claims 2 and 16, Boothby teaches a method wherein said step of propagating to the data repository comprises as claimed performing selected operations of adding, updating, and deleting information at the data repository, so that the data repository reflects changes made to user information at the data sets, (see col. 3, lines 46-50).

As per claims 3 and 17, Boothby teaches a method wherein said operation of deleting information as claimed comprises a logical delete operation of making information as having been deleted, (see figure 6, col. 8, lines 40-42).

As per claim 12, Boothby teaches a method wherein each mapping table is associated with a particular data set, (see col. 1, lines 9-25).

As per claims 5-6 and 13 Boothby teaches a method wherein one grand unification database is created for each type of user information which is to be synchronized, (see col. 3, lines 15-23).

As per claim 7, Boothby teaches a method wherein said environment includes types of user information selected from contact, calendar, and task-oriented information, (see col. 4, lines 33-51).

As per claims 9 and 18, the limitations of claims 9 and 18 are rejected in the analysis of claim 1, and these claims are rejected on that basis.

As per claims 10 and 11, Boothby teaches a method wherein each mapping comprises a mapping table storing a plurality of mapping entries, each mapping entry storing at least a first identifier for indicating a particular data record in the data repository which the entry is associated with, and a second identifier for indicating a particular data record at a particular data set which is the source for the user information, (see cols. 4 and 5, lines 59-67 and 1-13), also see column 8, lines 55-59.

As per claim 14, Boothby teaches a method wherein said particular information comprises a last-modified time stamp, derived at least in part from the client device where the associated user information was last modified, (see col. 8, lines 54-63).

As per claim 15, Boothby teaches a method wherein said particular information comprises a checksum value, for use with a data set residing at a client device that does not support time stamps, (see col. 3, lines 1-5).

As per claim 19, Boothby teaches a method wherein user information is stored at the data repository as unformatted blod data, (see col. 6, lines 19-31).

As per claim 20, Boothby teaches a method as claimed further comprises providing at least one type module for facilitating interpretation of user information stored as unformatted blod data at the repository (where desktop status set to unchanged and then the partial match is run through the key field search again, which readable as unformatted blod data at the repository, (see cols. 7 and 8, lines 26-67 and 1-51).

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Contact Information

6. Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mrs. KIM VU can be reached at (703) 305-8449. The FAX phone numbers for the Group 2100 Customer Service Center are: After Final (703) 746-7238, Official (703) 746-7239, and Non-Official (703) 746-7240. NOTE: Documents transmitted by facsimile will be entered as official documents on the file wrapper unless clearly marked "DRAFT".

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2100 Customer Service Center receptionist whose telephone numbers are (703) 306-5631, (703) 306-5632, (703) 306-5633.



Jean Bolte Fleurantin

7/23/03

JBF/



SHAHID AL ALAM
PATENT EXAMINER